5

TITLE OF THE INVENTION SPLICE VARIANT ISOFORM OF HUMAN CALCIUM CHANNEL

ABSTRACT OF THE DISCLOSURE

The present invention features nucleic acids and polypeptides encoding two novel splice variant isoforms of calcium channel α_{1B} subunit (CACNA1B). The polynucleotide sequence of CACNA1Bsv1 is provided by SEQ ID NO 1 and the polynucleotide sequence of CACNA1Bsv2 is provided by SEQ ID NO 3. The amino acid sequence for CACNA1Bsv1 is provided by SEQ ID NO 2 and the amino acid sequence for CACNA1Bsv1 is provided by SEQ ID NO 4. The present invention also provides methods for using CACNA1Bsv1 and CACNA1Bsv2 polynucleotides and the respective proteins to screen for compounds that bind to CACNA1Bsv1 and CACNA1Bsv2.

15

10